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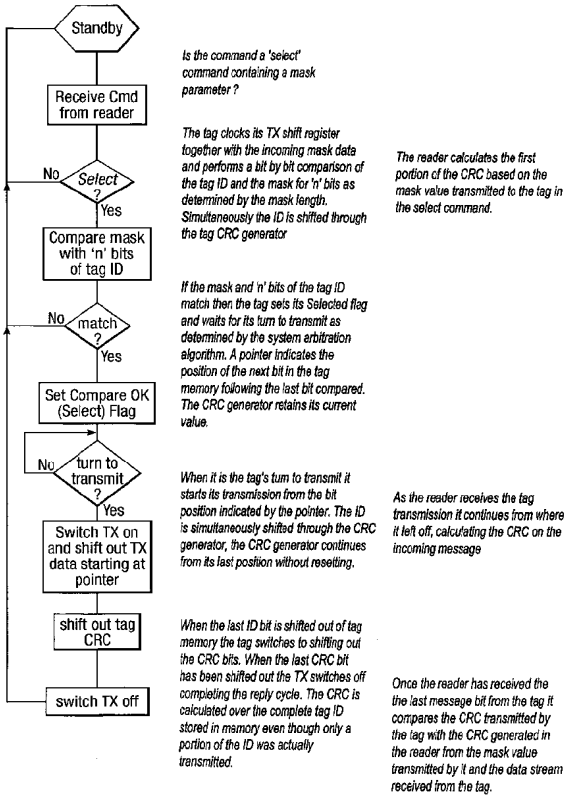
(54) Title: A METHOD AND SYSTEM FOR CALCULATING AND VERIFYING THE INTEGRITY OF DATA IN A DATA TRANSMISSION SYSTEM



(57) Abstract: A method is described of calculating and verifying the integrity of data in a data communication system. The system typically comprises a base station and one or more remote stations, such as in an RFID system. The method includes transmitting a select instruction from the base station to said one or more remote stations, the select instruction containing a data field which matches a portion of an identity or other data field in one or more of the remote stations; transmitting from a selected remote station or stations a truncated reply containing identity data or other data of the remote station but omitting the portion transmitted by the base station; calculating in the base station a check sum or CRC from the data field originally sent and the truncated reply data received and comparing the calculated check sum or CRC with the check sum or CRC sent by the remote station. A system and transponder is also described.

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